

Amendments to the Specification

Please amend the first paragraph of the specification as follows:

Cross-Reference to Related Applications

This application is a continuation-in-part of prior Application No. 09/545,334, filed April 7, 2000, now U.S. Patent 6,992,237, which claims the benefit of U.S. Provisional Application No. 60/129,844, filed April 16, 1999; this application also claims the benefit of U.S. Provisional Application no. 60/460,718, filed April 4, 2003. All prior applications to which benefit is claimed are hereby incorporated by reference.

Please amend page 30 of the specification, beginning at line 8, as follows:

In certain situations it may be preferable to silence or down-regulate certain genes, such as the cytokinin oxidase. Relevant literature describing the application of homology-dependent gene silencing include: Jorgensen, Trends Biotechnol. 8 (12):340-344 (1990); Flavell, Proc. Nat'l. Acad. Sci. (USA) 91:3490-3496 (1994); Finnegan *et al.*, Bio/Technology 12: 883-888 (1994); Neuhuber *et al.*, Mol. Gen. Genet. 244:230-241 (1994); Flavell *et al.* (1994) Proc. Natl. Acad. Sci. USA 91:3490-3496; Jorgensen *et al.* (1996) Plant Mol. Biol. 31:957-973; Johansen and Carrington (2001) Plant Physiol. 126:930-938; Broin *et al.* (2002) Plant Cell 14:1417-1432; Stoutjesdijk *et al.* (2002) Plant Physiol. 129:1723-1731; Yu *et al.* (2003) Phytochemistry 63:753-763; and U.S. Patent Nos. 5,034,323, 5,283,184, and 5,942,657. Alternatively, another approach to gene silencing can be with the use of antisense technology (Rothstein *et al.* in Plant Mol. Cell. Biol. 6:221-246 (1989); Liu *et al.* (2002) Plant Physiol. 129:1732-1743 and U.S. Patent Nos. 5,759,829 and 5,942,657. Methods and constructs for down-regulating expression of cytokinin oxidase are described in co-pending US provisional patent application, Cytokinin Oxidase-Like Sequences and Methods of Use, 60/_____, 60/559,252, filed April 2, 2004.

Please amend page 31 of the specification, beginning at line 1, as follows:

acid sequences shown herein as SEQ ID NOS: 27, 29, 31, and 33, as disclosed in co-pending provisional application, Cytokinin Oxidase-Like Sequences and Methods of Use, 60/559,252, filed April 2, 2004; as well as maize cytokinin oxidase of SEQ ID NO:38, encoding SEQ ID NO: 39, as disclosed in U.S. Patent 6,229,066 and WO99/06571. Use of the isolated polynucleotide encoding ipt (isopentenyl transferase), as provided at Molecular and General Genetics 216:388-394 (1989) and provided herein as SEQ ID NO: 1, and its deduced amino acid sequence SEQ ID NO: 2, is also contemplated by this invention, as is use of other cytokinin biosynthetic genes (e.g., ipt) isolated from other organisms, such as Arabidopsis or maize, for example.

Please amend page 32 of the specification, beginning at line 1, as follows:

promoters, SEQ ID NOS: 26-37 (co-pending provisional application, Cytokinin Oxidase-Like Sequences and Methods of Use, ~~60/~~_____, 60/559,252, filed April 2, 2004).

Please amend page 57 of the specification as follows, beginning at line 19:

Primers used for detection of mutations or polymorphisms in the ipt gene:

5'GCGTCCAATGCTGTCCTCAACTA 3' (SEQ ID NO: 40)

5'GCTCTCCTCGTCTGCTAACTCGT3' (SEQ ID NO: 41)

The above primers may be used for amplifying cytokinin biosynthetic enzyme cDNA or genomic clones isolated from a sample derived from an individual plant. The invention also provides the primers above with 1, 2, 3 or 4 nucleotides removed from the 5' and/or the 3' end. The primers may be used to amplify the gene isolated from the individual such that the gene may then be subject to various techniques for elucidation of the DNA sequence. In this way, mutations in the DNA sequence may be identified.

Please amend pages 100-101 of the specification as follows, beginning at line 17 of page 100 and ending with line 7 of page 101, as shown below:

The introduced restriction sites are bolded. The portion of the primer that binds to the template extends from nucleotides 22 and 19 to the 3' terminus, respectively. A BamHI site "ggatcc"(bolded) and a Kozak consensus sequence were introduced before the start codon and a HpaI site "gttaac" (also bolded) was introduced after the stop. ~~Following is a schematic showing how the primers attach to the published sequence.~~

—————BamHI

5'caucaucaucau**ggatcc**accaatggatctacgtctaat~~ttt~~eggtccaaac
aatggatctacgtctaat~~ttt~~eggtccaaacttgcacaggaaagacategactg
egatagctcttggccagcagactggcctcccagtcctctcgctcgatcgctccaatgctgtctcaactataaccggga
agcggggcgaccaacagtggaagaactgaaaggaaacgactcgctctgtaccttgatgatcgcccttggtaaaggggat
cattacagccaagcaagctcatgaacggctcattgcccagggtgcacaatcagaggccaaagggcgggtattcttg
agggaggatctatctcgttgctcagggtgcattggcgcaaaagtcgttattggaacggcgatttctgttgcataattatcgcaa
cgagttagcagaagaggagagcttcattgagcgtggccaaagaccagagtttaagcagatgttacgccccctctgcaggte
ttctattatccaagagttgggttcaacttggaggggagcctcggtgagggccatactggaagggatcgatggatategat
atgccctgctatttctaccagaaaccagatcaacgcccgatatgctattgcagctcgacgcagatatggagaataaatt
gattcaagggtatcgctcaggagtttctaatecatgcgcgtcgacaggaaacagaaattcccttgggtgggcgcgcagcgt
gtcgaagegtttgaaggaccaccatttgaatgtga

—————3'cctgggtggttaaagcttacact**cattg**aucaucaucauc

HpaI

Please amend page 102 of the specification as follows, beginning at line 20:

5' CATGCCATGGCGGTGGTTTATTACCTGCT 3' (with NcoI site at 5' end) (SEQ ID NO: 42)

5' CGGGATCCTCATCATCAGTTGAAGATGTCCT 3' (with BamHI site at 3' end)
(SEQ ID NO: 43)